information submitted by the parties.⁶ The Staff expressed strong belief that the Report is accurate and correct and will aid CLEC entry into the local market.

BellSouth raised objections to certain proposed solutions as recommended by the Commission Staff in its report filed December 23, 1997. These will be discussed in turn in the following sections. For each of these items, the "potential issue" identified in the Commission Staff's Report (Appendix A hereto) is shown along with the accompanying proposed solution from the Staff Report, followed by a brief discussion.

A. Pre-Ordering

The pre-ordering OSS function allows a CLEC to gather and confirm information necessary to place an accurate order for its end use customer. In general, pre-ordering consists of several functions including street address validation, telephone number reservation, feature availability, service availability, due date information, and customer service records. Like BellSouth, many CLECs retrieve pre-ordering information from BellSouth's databases while a customer is on the line. Therefore timely access to pre-ordering information is critical to a CLEC's ability to enter and compete in the local exchange market. Similarly, the CLEC must be able to incorporate the relevant pre-ordering information into an order both quickly and accurately.

Item 1.d.

Issue: Human to machine interface requires dual entry of information.

Suttion: Proposed API interface will alleviate many of these problems.

BellSouth provides a proprietary terminal-type interface called Local Exchange Navigation System ("LENS"), and offers it as a system predominantly for access to preordering OSS functions. LENS also includes ordering functions, but these functions are less well developed. LENS is a Graphic User Interface or "GUI"-based interface that allows a CLEC to use a browser software program to retrieve information from a BellSouth server on a real-time basis. Competing carriers can connect to LENS through dedicated local area network (LAN-to-LAN) connections, through dial-up connections, or through the public Internet.

Much attention has been focused on further development of Electronic Data Interchange or "EDI"-based interfaces. BellSouth offers EDI as a system predominantly

⁶ Staff Direct at 8.

⁷ BellSouth witness Stacy, Tr. 87; BellSouth Brief at 2.

⁸ GUI-based interfaces are widely recognized as much easier for people to use because they employ graphics (e.g., icons) rather than relying solely upon rote usage of typed verbal commands. Virtually all modern software programs, especially for consumers and small business users, are GUI-based.

⁹ The EDI standard is defined by the Telecommunications Industry Forum. See Local Competition First Report and Order, 11 FCC Red at 15761, ¶ 513, n. 1238.

for access to ordering OSS functions.¹⁰ This has engendered contention between BellSouth and CLECs who argue, among other things, that BellSouth has not done enough to provide a seamless interface that minimizes human intervention for preordering and ordering functions. For example, CLECs must "cut and paste" information from LENS (a pre-ordering interface) to EDI (an ordering interface), while BellSouth is able to automatically bring up a Customer Service Record ("CSR"), and the CSR information is populated into the order.¹¹ Integration of the pre-ordering functions with the ordering functions of either BellSouth's or the CLEC's OSS is important because it minimizes manual processes that add costs, delays, and errors.¹²

The Staff determined and stated in the Staff Report that the Application Program Interface ("API"), as presented and discussed by BellSouth and the other parties at the Technical Workshop, is a start in the right direction to resolving the human to machine interface problem. API will enable greater integration of the pre-ordering and ordering functions. A lack of integration engenders errors, is costly, and ultimately affects the end user customers. An integrated pre-ordering/ordering system eliminates the need for re-keying information, so that whichever company uses it - BellSouth for its internal ("legacy") systems, or CLECs for the new interfaces - can enter information once and then transfer the information electronically from one system to another.

BellSouth's proposed API Gateway will provide a pre-ordering interface and an ordering interface, which will both be machine-to-machine, use a common protocol, and therefore will be easily integrated with the CLECs' own OSS. Among the benefits of API will be less need for dual entry of information into the systems. The current need for dual entry, and hence the additional human intervention, also results in unduly high fallout rates in which orders are not accurately processed. Based upon the comments and information provided by the parties, the Staff stated that the proposed API interface will alleviate many of the problems indicated by the parties ¹³

BellSouth's objection was that other methods are already available for CLECs to integrate pre-ordering and ordering functionality, and to integrate this functionality with their own customer service and billing records, eliminating any need for dual entry of data. For example, BellSouth provided an updated CGI-LENS¹⁴ specification (Stacy's Ex. WNS-1) to MCI on December 15, 1997. BellSouth also made EC-Lite, a machine-to-machine pre-ordering interface, available on December 30, 1997. According to

¹⁰ BellSouth witness Stacy, Tr. 87; BellSouth Brief at 2. For interested CLECs, BellSouth has made available the EDI-PC Harbinger software and training manual, as one way to use an EDI interface on a personal computer ("PC") system. BellSouth also offers the Exchange Access Control and Tracking ("EXACT") interface as a system primarily for ordering functions.

¹¹ See Sprint Comments, November 21, 1997; and Sprint Comments Regarding Staff Report, January 27, 1998.

¹² Tr. 545.

¹³ Commission Staff testimony at 7-8; Commission Staff Ex. 1 (Matrix p. 1).

¹⁴ The term "CGI-LENS" refers to BellSouth's Common Gateway Interface ("CGI") to its Local Exchange Navigation System ("LENS"). Stacy Direct at 10.

¹⁵ Stacy Direct at 4-5.

BellSouth, CLECs can integrate EC-Lite with EDI and/or with their own OSS. However, these approaches suggested by P. llSouth impose upon CLECs the burden of attempting to perform the integration of the pre-ordering systems (CGI-LENS or EC-Lite) with ordering systems. This is exacerbated by the fact that the interfaces and the associated software, specifications, and manuals are revised from time to time. In addition, this is especially burdensome for the smaller CLECs.

Further, the LENS-CGI specification does not have all of the required information to enable a CLEC to perform the necessary development effort for integration, and BellSouth has not kept that specification current.¹⁷ In addition, BellSouth's LENS-CGI specification requires the use of an underlying Hyper Text Markup Language ("HTML") presentation as part of the data delivery mechanism, and this forces CLECs into a slower, less efficient integration than is available to BellSouth for its comparable retail operations.¹⁸

BellSouth stated that the API is simply another form for providing the same preordering and ordering functions provided by the other interfaces mentioned above. API does not create any new functionality above that which already exists in those interfaces. The BellSouth Wholesale API gateway will provide a machine-to-machine interface between BellSouth's back office systems and CLECs.¹⁹ The point is not, however, whether API will create a new functionality, but whether API will mitigate the integration problems and help to resolve the problems experienced due to dual entry or re-keying of information. As BellSouth stated, API will provide the pre-ordering and ordering functions previously provided by separate interfaces. This represents a significant step forward

The development of API will generally alleviate many of the concerns raised by CLECs in this proceeding. BellSouth has agreed to develop API, and the CLECs have voiced interest in API throughout this case. API is based on one of the two industry standards for pre-ordering identified by the Electronic Communication Implementation Committee ("ECIC"). It also uses Common Object Request Brokering Architecture ("CORBA") as its base software technology. CORBA is a very popular and widely used software technology outside of the telecommunications industry. Consequently, personnel skilled in CORBA are more readily available, which makes CORBA software less expensive to develop and maintain, and increases the probability and speed of technological advancements. 21

¹⁶ Stacy Direct at 5.

¹⁷ Tr. 547; 715-17, 724-25.

¹⁸ HTML presentation forces CLECs to proceed through each of the LENS presentation screens, rather than being able to use the data independently of the screens as the initial CGI proposal would have allowed. AT&T Brief at 9.

¹⁹ Stacy Direct at 10.

²⁰ Tr. 591-93; 621.

²¹ Tr. 622.

The implementation date Staff proposed in the Report is by December 31, 1998, which is based upon BellSouth's projection of the length of time needed to contract with a vendor, conduct testing, and make API available. While it is possible that API may be on-line and available by September or October, 1998, it is important to allow sufficient time for testing to ensure that the interface will be as reliable as possible. Moreover, the CLECs should have an opportunity to provide their input at the development and testing stages, to ensure that the functionalities they need are included in the API interface. The proposed implementation date allows reasonable time for these efforts. The Commission agrees that it is reasonable to allow December 31, 1998 as the date by which BellSouth shall develop and test API and make it available for the CLECs' use.

Item 2.b.

Issue: Rates of services and equipment items displayed on Customer Service Record ("CSR") are not presented in LENS.

Solution: BST shall make this information available via fax and electronically through LENS.

BellSouth began providing rates for products and services to Georgia CLECs via facsimile ("fax") during 1997, as part of the Customer Service Records ("CSRs"). BellSouth then began stripping away the rates of services and equipment items from the CSR when providing the CSR through LENS.²² This was one of the issues presented by CLECs in this docket. The FCC has also recognized the significance of CSR information as part of the pre-ordering OSS function.²³

As BellSouth admitted, the rate information is not proprietary.²⁴ There is a demand for the rate information to be included with the CSRs.²⁵ This case is focused upon technical concerns, and there is no dispute that including the rate information in CSRs is technically feasible. There is no technical impediment to providing rates on

²² BellSouth witness Stanley, Tr. 379-80.

²³ In the Matter of Performance Measurements and Reporting Requirements for Operations Support Systems, Interconnection, and Operator Services and Directory Assistance, CC Docket No. 98-56, RM-9101, Notice of Proposed Rulemaking (FCC 98-72, rel. Apr. 17, 1998) ("FCC OSS NPRM"), at ¶ 43, n. 53. The FCC has stated that "although an incumbent carrier is not required to disclose [customer proprietary network information] CPNI pursuant to section 222(d)(1) or section 222(c)(2) absent an affirmative written request, local exchange carriers may need to disclose a customer's service record upon the oral approval of the customer to a competing carrier prior to its commencement of service as part of the LEC's obligations under sections 251(c)(3) and (c)(4)." The FCC also stated that "a carrier's failure to disclose CPNI to a competing carrier that seeks to initiate service to a customer that wishes to subscribe to the competing carrier's service, may well, depending upon the circumstances, constitute an unreasonable practice in violation of section 201(b)." In the Matter of Implementation of the Telecommunications Act of 1996: Telecommunications Carriers' Use of Customer Proprietary Network Information and Other Customer Information: Implementation of the Non-Accounting Safeguards of Sections 271 and 272 of the Communications Act of 1934, as Amended. CC Docket No. 96-115 and 96-149, ¶¶ 84-85 (rel. Feb. 26, 1998).

²⁴ Stanley Direct at 3, Tr. 87-88; Tr. 367, 369-70. See also BellSouth Brief at 3.

²⁵ See, e.g., MCI Brief at 9-10.

CSRs.²⁶ In fact, the rate information is already contained in the CSRs, and BellSouth's proposal is to remove it when providing the CSRs to CLECs.²⁷ BellSouth's testimony claiming marketing reasons for removing the rate information before passing it through the CSRs was not credible.²⁸ BellSouth's claim that the rate information becomes proprietary when included in the CSR²⁹ was not adequately supported, was undermined by the facts that BellSouth had previously provided such information in fax format and that the basic rate information is not proprietary, and was generally not credible. In addition, CLECs cannot randomly browse through the CSRs to locate potential customers because they must obtain explicit customer approval before viewing a CSR.³⁰

The Commission concludes that BellSouth should make this information in the CSRs available via fax and electronically²¹ (i.e., through LENS and other electronic interfaces) with an implementation date originally set as of January 30, 1998.³² The Commission notes that the use of fax rather than electronic means (such as through LENS) must be at the option of the CLEC, since some CLECs choose not to use the LENS interface.

Item 3.h.

Issue: LENS is limited to a maximum of six lines per residence or business request and a maximum of 20 features per line.

Solution: The proposed API interface will eliminate these limitations.

BellSouth is able to reserve 25 telephone numbers per order electronically, but CLECs are limited to six telephone numbers though LENS.³³ LENS has a similar limitation of 20 features per line. This limits the CLECs in the pre-ordering functions, compared with BellSouth's internal pre-ordering capabilities.

²⁶ This was acknowledged by BellSouth's witnesses Mr. Stacy, Tr. 263, and Mr. Stanley, Tr. 383.

²⁷ Tr. 383.

²⁸ Tr. 383-385.

²⁹ See BellSouth Brief at 3-4.

³⁰ Tr. 369.

³¹ In addition, pursuant to item 3(b) under the Pre-Ordering section of the OSS Report Matrix, it is the Commission's understanding that BellSouth has made available electronically, via web interface, the information on its promotional offerings. The ability of CLECs to access the promotional offerings information electronically via BellSouth's web pages is another step in compliance with the OSS Report that will aid entry into the local exchange market.

³² As discussed subsequently with respect to implementation dates, this should be implemented immediately with a follow-up report since this date has passed.

³³ Tr. 707; MCI Brief at 11. BellSouth witness Mr. Stacy testified that CLECs may reserve 12 numbers "per session" in LENS. (Tr. 119.) Aside from this factual dispute, it is certain that there is a substantial discrepancy in the number of telephone numbers that can be ordered. Mr. Stacy also testified that a CLEC may order 25 telephone numbers through EC-Lite. (Tr. 119.) However, it is not clear that EC-Lite is practically available to CLECs other than AT&T. EC-Lite is a proprietary interface developed by BellSouth for AT&T, has not been adopted as a potential industry standard by the Electronic Communication Interface Committee ("ECIC") (Tr. 211, 704), and it appears that other CLECs do not intend to use that interface (Tr. 717).

The continued development of API, along with input from the parties, should start to alleviate these concerns. In general, API more closely replicates the methods by which BellSouth's own internal OSS interfaces operate than any other interface BellSouth offers to CLECs.³⁴ Based upon the information provided at the Technical Workshop, the Staff submitted that the proposed API interface will not contain this limitation which is in the LENS interface. The Commission finds that the Staff's recommendation is appropriate and should be adopted. BellSouth should implement the API solution by December 31, 1998.

B. Ordering

Item 1.i.

Issue: CLEC orders placed through LENS are currently limited to a maximum of six lines per residence or business request, and a maximum of 20 features per line. Solution: Issue addressed in 3.h. of Pre-Ordering (the proposed API interface will eliminate these limitations).

This item and the Commission's determination of it are the same as for Pre-Ordering Item 3.h (above).

In its Brief, BellSouth also addressing Ordering Item 1.b. regarding electronic mail ("email") capabilities for complex services. The Staff Report proposed that BellSouth provide email capabilities for pre-ordering and ordering of complex services, on an initial basis. This would be an interim step toward a more long-term capability for electronically ordering complex services. BellSouth stated that developing the email capability is a "worthwhile business goal," but balked at the Staff's recommended time frame for implementation on the basis that it would require "discussion among all parties about the type of form or email to be used, the data required on the form, where the form is to be sent, etc. 35 The Commission is not persuaded by BellSouth's arguments regarding this item. The email solution is merely an interim step, and requires minimally that the same form currently being used on paper (for example, sent to BellSouth by fax) be made available as an electronic document that CLECs can fill out as a word processing document and return to BellSouth by email. It does not require that the form be converted to an electronic form filled out interactively at this time. Permitting the CLECs to use the word processing version of the form for ordering complex services and returning it to BellSouth's designated representative(s) by email does not impose a burden or complexity on BellSouth. The Commission agrees that the Staff's recommendation on this item is reasonable and should be adopted.

C. Billing

Item 1.f.

Issue: BellSouth has failed to provide systems for accessing usage data for flat rate calls.

³⁴ Stacy, Tr. 198-199.

³⁵ Stacy, Tr. 88-89; BellSouth Brief at 5-6.

Solution: BellSouth will add capability in central offices to capture data for flat rate calls.

The Staff recommended that BellSouth add the capability in each of its central offices to capture data for flat rate calls. BellSouth currently records flat rate customer usage data, such as the frequency and geographical destination of customer calls, where capacity is available; and BellSouth has the necessary capacity in 80 to 90 percent of its switches.³⁶ BellSouth objected to the Staff's recommendation on this point.

The collection of this data is technically feasible.³⁷ BellSouth does not currently process the flat rate data for itself or any CLEC. BellSouth drops the records from further handling since it does not currently bill charges based on them, and its switches do not record any information to determine whose records belong to whom.³⁸ Mr. Scollard testified that there is a difference between simply recording the data, and performing the value-added processing activities that transform the raw recorded data into useful information (i.e. industry standard usage record formats).

There is a demand for the usage data for calls that are currently flat-rated. For example, CLECs could use the data to develop and offer innovative services. CLECs could also use the information to better determine where and in what manner to build their own facilities. It may be that only certain CLECs would request such usage data for their own local telephone customers. Mr. Scollard asserted that there would be substantial costs to deploy the hardware and software necessary to process the data into a usable format available to CLECs. However, he acknowledged that the class would be pro-rated for each state in the BellSouth region, by central office. 41

The Commission notes that the proceedings in this docket were based upon technical feasibility rather than cost issues.⁴² In addition, BellSouth has already agreed in interconnection agreements to provide usage data for flat rate calls. For example, BellSouth has agreed to the following:

BellSouth shall provide the Customer Usage data recorded by BellSouth. Such data shall include complete AT&T Customer usage data for Local Service, including both local and intraLATA toll service (e.g., call detail for all services, including flat-rated and usage-sensitive features)....

³⁶ Scollard, Tr. 288.

³⁷ BellSouth witness Mr. Scollard, Direct at 2.

³⁸ Scollard Rebuttal at 2.

³⁹ AT&T Brief at 17-18. Moreover, no CLEC had requested that BellSouth process this information through its entire billing system rather than simply sort the raw recorded data, a task BellSouth witness Scollard admitted had not necessarily been analyzed by BellSouth. Tr. 332. According to AT&T, processing usage data through BellSouth's entire system is not necessary nor is it desired. AT&T Brief at 18; AT&T witness Bradbury, Tr. 568.

⁴⁰ Scollard Direct at 3.

⁴¹ Tr. 343.

⁴² Tr. 48.

BellSouth-AT&T Interconnection Agreement, Part I, Section 28.8 (Feb. 3, 1997), approved by the Commission in Order Approving Arbitrated Interconnection Agreement, Docket No. 6801-U (March 5, 1997).

Processing flat rate call records only far enough to convert them into standard industry format is much less expensive than processing such records through BellSouth's entire billing system. 43 In addition, the cost of complying with the Staff's proposed solution on this item will be borne by those carriers, including BellSouth, which request and receive such data. 44 These are additional reasons why the cost to implement the proposed solution should not be unduly burdensome.

BellSouth witness Mr. Scollard acknowledged that BellSouth has a structure of charges to the CLECs for obtaining similar data, established in Docket No. 7061-U. In the Commission's Order in Docket No. 7061-U. Review of Cost Studies, Methodologies, and Cost-Based Rates for Interconnection and Unbundling of BellSouth Telecommunications Services (December 16, 1997), at page 57, BellSouth was afforded the opportunity to file further information in that docket on its proposed OSS cost recovery amounts. The Commission stated in that Order:

The Commission addressed the question of cost recovery for BellSouth's development of electronic interfaces for OSS in its Supplemental Order in Docket No. 6352-U. The Commission ruled therein that all costs incurred by BellSouth to implement these interfaces shall be recovered from the industry; although the Commission added that it would resolve any disputes regarding this The Commission concludes that the CLECs should be required to pay for at least some portion of BellSouth's costs of developing the OSS electronic interfaces. However, it is true that little documentation was provided in the record regarding the reasonableness of the total amounts now sought to be recovered. The Commission will direct BellSouth to file further information on its proposed OSS cost recovery amounts, so that the Commission and its Staff may further review these costs and the associated rate design, after BellSouth has implemented the long-term electronic interfaces that were projected for completion by December 1997. The Commission Staff may make a recommendation to the Commission as to whether any further proceedings would be appropriate, following such review

Order Establishing Cost-Based Rates, Docket No. 7061-U, at 57 (Dec. 16, 1997). The Commission then proceeded to establish the rates that BellSouth shall charge CLECs at this time, in order to recover OSS costs. Id. The Commission ruled that following the implementation of long-term electronic interfaces for OSS functions that were scheduled

⁴³ Tr. 568.

⁴⁴ Tr. 567.

for the end of December 1997, BellSouth shall submit a detailed report of its electronic interface costs for the Commission's review. *Id.* at 65. The Commission will determine an appropriate rate recovery mechanism for BellSouth's continued recovery of OSS costs following such review.

Thus for this item, and for any other item in this case as to which BellSouth expressed concerns regarding cost recovery, the Commission has already afforded BellSouth an opportunity to provide information on proposed cost recovery amounts, for the Commission's review. That is the appropriate avenue for BellSouth to pursue its OSS cost recovery concerns.

The Commission concludes that BellSouth should add the hardware capability in the remaining central offices to capture data for flat rate calls, and to deploy the software necessary to process the data into a usable format available to CLECs. BellSouth should implement this solution by December 31, 1998.

D. General

Items 2.a. through 2.d.

Issues: 2a. Interim interface.

- 2b. Not compatible with industry standard EDI interfaces.
- 2c. CLECs cannot integrate pre-ordering and ordering at parity with BellSouth.
- 2d. Need for machine-to-machine or API for pre-ordering.

Solution: EDI and API will be based on industry standards and therefore can be integrated and available for machine-to-machine use.

The development of the EDI and API interfaces will occur in conjunction with the continued development of industry standards. BellSouth stated that its development of future EDI software releases will conform to the available industry standards, and the development of the ordering section of the API will conform to these standards. However, the development of the pre-ordering section of the API, and sections relating to other data, including rejects, errors, jeopardies, order status, etc., cannot be based on industry standards at this time because they do not yet exist. 46

BellSouth witness Mr. Stacy added that BellSouth is committed to developing these portions of the API jointly with the CLECs, but all parties must recognize that this development may not be consistent with standards that are adopted in the future. However, BellSouth is committed to developing interfaces that do conform to national standards.⁴⁷

Mr. Stacy testified that API will allow CLECs to obtain pre-ordering information and to place orders in exactly the same manner that LENS CGI, EC Lite, and EDI

⁴⁵ Stacy Direct at 13.

⁴⁶ BellSouth January 9, 1998 Comments; Stacy Direct at 13.

⁴⁷ Stacy Direct at 13.

function now.⁴⁸ Mr. Stacy also testified that the Wholesale API Gateway will provide a machine-to-machine interface between BellSouth's back office systems and CLECs.⁴⁹ The EDI and API interfaces will be available for machine-to-machine use.

Mr. Stacy provided as Exhibit 3 to his rebuttal testimony a Bellcore report regarding BellSouth's software solutions process framework ("SSPF"). The report describes and uses a process maturity framework developed by the Software Engineering Institute, called the capability maturity model ("CMM").⁵⁰ The CMM is a methodological foundation for SSPF.⁵¹ The CMM for software has standardized the measurement of software process maturity of organizations, and it is intended to help software organizations improve their processes through five different levels of maturity.⁵² At the initial level (level 1), the software development environment is undefined (ad hoc) and unstable. The software processes are constantly being changed or modified as the work progresses. The software process capability at level 1 is unpredictable.⁵³ The Bellcore report indicated that BellSouth's SSPF is a first step toward achieving CMM level 2.⁵⁴ Mr. Stacy acknowledged that this means BellSouth has not yet achieved CMM level 2.⁵⁵

The Commission finds that the Staff's recommendation regarding this item is appropriate and should be adopted. The Staff Report originally showed March 16, 1998 as the implementation date for EDI version 7.0; therefore, this should be implemented immediately with a follow-up report since this date has passed. The implementation date for API should be December 31, 1998. This implementation date should also allow BellSouth sufficient time to evaluate its software adequately, with the aid of Bellcore, and to achieve CMM level 5 (or an appropriately high level) of software process maturity for this interface.

IV. IMPLEMENTATION ISSUES

BellSouth stated that it would adopt certain proposed solutions as recommended by the Staff Report, with adjustment to the proposed implementation dates, as indicated in the following sections. BellSouth added that some of these changes were requested by AT&T.⁵⁶

The Commission finds that BellSouth has not provided sufficient reason for changing the proposed implementation dates. The Commission also finds that AT&T

⁴⁸ Stacy Rebuttal at 15.

⁴⁹ Stacy Direct at 10.

⁵⁰ Stacy Ex. WNS-3, section 2.2, page 2-2.

⁵¹ Tr. 190-191.

⁵² Tr. 191.

⁵³ Stacy Ex. WNS-3, section 2.2.1, page 2-3.

⁵⁴ Stacy Ex. WNS-3, section 2.1.1, page 2-1.

⁵⁵ Tr 192.

⁵⁶ See BST witness Mr. Stacy's Exhibit WNS-5.

should not be in the position of unilaterally changing these dates. Furthermore, AT&T is only one of many CLECs in Georgia. The Commission finds that the proposed implementation dates in the original Staff Report were reasonable and appropriate.

Since the Staff-recommended implementation dates for these items have passed or will have passed at the time of the Commission's Order, the Commission concludes that it is reasonable to require BellSouth to comply immediately and submit a report within 30 days from the date of the Commission's Order, stating exactly what BellSouth has done to implement these solutions contained in the Staff Report.

The following sections show the implementation dates in the Staff Report which BellSouth proposed to adjust. The Staff recommended that for these dates which have passed as of the date of this Order, BellSouth should be directed to comply immediately and to submit a report within 30 days after the Order, stating what BellSouth has done to implement the proposed solutions.

A. Pre-Ordering

- 1c. Proposed implementation date of January 30, 1998. BellSouth adjusted to February 2, 1998 (Completed).
- 3b. Proposed implementation date of December 17, 1997. BellSouth adjusted to January 30, 1998 (Completed).
- 3c. Proposed implementation date of March 30, 1998. BellSouth adjusted to June 30, 1998 for EC-Lite, August 30, 1998 for API and December 31, 1998 for LENS.
- 3d. Proposed implementation date of January 30, 1998. BellSouth adjusted to June 30, 1998 for LENS and August 30, 1998 for API.
- 3f. Proposed implementation date of March 30, 1998. BellSouth adjusted to June 30, 1998 originally and then to December 31, 1998.
- 42. Proposed implementation date of January 5, 1998. BellSouth adjusted to January 30, 1998 (Completed).

B. Maintenance and Repair

- 1a. Proposed implementation date of February 2, 1998. BellSouth adjusted to March 2, 1998 at AT&T's request.
- 1b. Proposed implementation date of February 2, 1998. BellSouth adjusted to March 2, 1998 at AT&T's request.

- 2b. Proposed implementation date of February 2, 1998. BellSouth adjusted to March 2, 1998 at AT&T's request.
- 2c. Proposed implementation date of February 2, 1998. BellSouth adjusted to March 2, 1998 at AT&T's request.
- 4a. Proposed implementation date of February 2, 1998. BellSouth adjusted to March 2, 1998 at AT&T's request.

C. Ordering

- 1b. Proposed implementation date of January 30, 1998. BellSouth adjusted to April 30, 1998
- 2d. Proposed implementation date of January 5, 1998. BellSouth adjusted to January 12, 1998 (Completed).
- 2e. Proposed implementation date of December 19, 1997. BellSouth adjusted to January 30, 1998 (Completed).
- 2g. Proposed implementation date of March 31, 1998 (First Quarter 1998). BellSouth adjusted to December 31, 1998 (Fourth Quarter 1998).
- 2h. Proposed implementation date of March 31, 1998 (First Quarter 1998). BellSouth adjusted to November 1, 1998 for API and December 31, 1998 for EDI.
- 2j. Proposed implementation date of December 19, 1997. BellSouth adjusted to January 30, 1998 (Completed).
- 3a. Proposed implementation date of December 19, 1997. BellSouth adjusted to January 30, 1998 (Completed).

Since the Staff-recommended implementation dates for all of these items have passed as of the date of this Order, the Commission concludes that BellSouth should be ordered to comply immediately and to submit a report within 30 days from this Order, stating exactly what BellSouth has done to implement the Staff Report's proposed solutions.

D. Progress Reports

The Staff recommended that BellSouth and interested CLECs be directed to work together in developing and submitting progress reports to the Commission. The Commission finds that this is a reasonable method of monitoring the progress in implementing the solutions adopted herein. Directing the industry participants to work together in this effort will also assist in fostering collaborative efforts to resolve disputes and move OSS development forward.

The core members of the participants who shall file these joint reports should be BellSouth and the following intervenors: AT&T, ICI, LCI, MCI, and Sprint. All other CLECs are also expected to share responsibility for participating in this process, and are invited to add information or comments to the joint reports.

The schedule for submitting the joint progress reports should be altered from the Staff's original December 23, 1997 recommendation, because the need for hearings postponed the Commission's adoption of solutions. The Commission finds that the schedule and procedures set forth in the attached Appendix B are reasonable and should be adopted for the joint reports.

V. CONCLUSION AND ORDERING PARAGRAPHS

The Commission finds and concludes that the Staff Report contains feasible and reasonable solutions to the technical issues raised during the Technical Workshop process in this locket. The Commission concludes that it is reasonable and appropriate to adopt the Staff Report attached hereto as Appendix A and incorporated herein by reference. For those implementation dates in the Staff Report which have passed as of the date of this Order, BellSouth is directed to comply immediately and to submit a report within 30 days from the date of this Order, stating exactly what BellSouth has done to implement the Report's proposed solutions. The Commission also adopts the procedures and changes in the schedule for progress reports by the parties contained in Appendix B hereto. The Commission therefore adopts the Staff Report, and these slight modifications regarding implementation dates and progress report dates, as its OSS Report. The Commission directs BellSouth to comply fully with the OSS Report as adopted by this Order.

WHEREFORE IT IS ORDERED, that the Commission adopts the OSS Report reflected in Appendices A and B in their entirety.

ORDERED FURTHER, that BellSouth is directed to comply fully with the OSS Report as adopted by this Order. For those implementation dates in Appendix A which have passed as of the date of this Order, BellSouth is directed to comply immediately and to submit a report within 30 days from the date of this Order, stating exactly what BellSouth has done to implement the Report's proposed solutions.

ORDERED FURTHER, that the Commission directs BellSouth and the parties to file progress reports in this docket, to apprise the Commission of the status of implementation of the solutions in the Report. Each of these reports should be a joint report submitted by all interested industry participants according to the procedures and schedule set forth in Appendix B. The core members of the participants who shall file these joint reports are BellSouth and intervenors AT&T, ICI, LCI, MCI, and Sprint. All other CLECs are also expected to share responsibility for participating in this process, and are invited to add information or comments to the joint reports.

ORDERED FURTHER, that all findings, conclusions, and statements set forth in the preceding sections of this Order are adopted as findings of fact, conclusions of law, and statements of regulatory policy of this Commission.

ORDERED FURTHER, that a motion for reconsideration, rehearing, or oral argument or any other motion shall not stay the effective date of this Order, unless otherwise ordered by the Commission.

ORDERED FURTHER, that jurisdiction over these matters is expressly retained for the purpose of entering such further Order or Orders as this Commission may deem just and proper.

The above by action of the Commission in Administrative Session on April 21, 1998.

Executive Secretary

Robert B. Baker, Jr.

une 3,

Chairman

Appendix B

Schedule for Progress Reports by the Parties

The OSS Report calls for the parties in the industry to file reports in this docket, to apprise the Commission of the status of implementation of the solutions. Each of these reports should be a joint report submitted by all interested industry participants. The process of developing such joint reports should be an additional means of facilitating productive communications among all the affected parties.

The format of the reports should follow the Matrix in the OSS Report, with the addition of a fourth column showing whether (and when) implementation milestones have been accomplished. These joint reports should be filed under Docket No. 8354-U with the Commission's Executive Secretary, with both an electronic version and 25 paper copies, on specified dates. The Staff's original schedule for these reports must be modified to allow for the hearings that have been concluded. Therefore, the Commission adopts the following modified schedule:

Original	Recommended	Schedule

February 10, 1998 March 10, 1998 April 10, 1998 May 10, 1998 June 10, 1998 July 10, 1998 October 10, 1998 January 10, 1999

Modified Schedule

June 10, 1998 July 10, 1998 August 10, 1998 September 10, 1998 October 10, 1998 November 10, 1998 February 10, 1999 May 10, 1999

	POTENTIAL ISSUE		PROPOSED SOLUTION		IMPLEMENTATION TIME FRAME
1.	rsagalins				
•	Download of RSAG has not been provided.	. .	BST shall make download of RSAG available, and provide for periodic updates of information.		January 30, 1998
b.	Information provided to BST (e.g. Connect Through and QuickServe) is not provided to CLECs.	Ь	Not an issue (BST providing through LENS browser, CGI interface, and EC-LITE).	b.	N/A
C.	Requires multiple screen process and repeated address validation.	C.	BST has stated that it will revise this inquiry process.	C.	January 30, 1998
đ	Human to machine interface requires dual entry of info.	d.	Proposed API interface will alleviate many of these problems.	d	January 28, 1998 (Vendor selected) (Implementation by the end of 1998)
2.	Customer Service Record				
4.	Not given access to the same CSR information BST uses and are limited to printing 50 pages.	a ,	BST currently limits its retail operation to a 54 page print limit. The proposed API interface will eliminate this current limitation.		January 28, 1998 (Vendor selected) (Implementation by the end of 1998)
b.	Rates of services and equipment items displayed on CSR are not presented in LENS.	b.	BST shall make this information available via fax and electronically through LENS.	b.	January 30, 1998
c.	No "refer to" number is provided on certain CSRs. CLECs must call LCSC to obtain the number.	C.	Not an issue.	c.	N/A

	POTENTIAL ISSUE		PROPOSED SOLUTION		IMPLEMENTATION TIME FRAME
3.	Limbed Products and Services				
4.	A complete list of all valid "USOCs" has not been provided to the CLECs.	4 .	BST shall make a complete list of valid USOCs available to CLECs and provide monthly updates to this information.	•	January 30, 1998
b.	Failure to provide information regarding promotional offerings	b.	BST is currently providing this information in a paper format and will determine whether an electronic version can be provided.	Ь	December 17, 1997 (Notice of availability)
C.	Failure to provide blocks of DID numbers and DID trunk inquiry.	C.	BST shall sake blocks of ten DID numbers available electronically.	C.	Merch 30, 1998
d.	Lack of accurate PSIMS information and is received by batch file.	d.	BST shall make accurate information available in PSIMS.	d.	January 30, 1998
C.	LENS is not designed to accommodate Unbundled loop and certain complex resale orders.	¢.	This issue is addressed in 1s of Ordering.	e.	March 16, 1998 for Version 7.0 January 30, 1998 for LEO, LESOG and SOER
ſ.	PIC information is not listed in an efficient manner.	ſ.	BST shall add a search capability for PICs in LENS.	f.	March 30, 1998
g.	ESSX and MultiServe information is not available.	B.	This issue is addressed in 1g of Ordering.	8.	March 30, 1998
h.	LENS is limited to a maximum of 6 lines per residence or business request and a maximum of 20 features per line.	ħ.	The proposed API interface will eliminate these limitations.	h.	End of 1998

	POTENTIAL ISSUE		PROPOSED SOLUTION		IMPLEMENTATION TIME FRAME
4	Telephone Number Resources				
•	Limits number reservation to six numbers/LENS session and 100 numbers/end office.	a .	BST is removing 100 number limit for LENS and EC-Lite.	a .	January 5, 1998
b.	BST's RNS system automatically generates a telephone number to offer a customer but CLECs must use telephone number reservation in LENS.	ð.	BST is providing telephone number availability in a sufficient manner.	b.	N/A
C.	CLECs cannot determine NXX codes available to offer customers.	C.	This information is currently provided in LERG. The proposed API interface will also make this information available.	c.	N/A
d.	BST does not provide parity of access to vanity numbers.	d.	BST is providing vanity number availability in a sufficient manner.	d.	N/A
E.	BST does not enable CLECs to hold a telephone number for 30 days without using cumbersome (firm order mode) of LENS. In the (inquiry mode) CLECs may only make reservations for 9 days.	€.	BST shall make 30 day number reservation available to CLECs.	e.	March 30, 1998
f.	ATLAS information is received by a periodic file data transfer.	ſ.	Not an issue.	£.	N/A

	POTENTIAL ISSUE		PRO20SED SOLUTION		IMPLEMENTATION TIME FRAME
5.	Due Bates				
4.	Access for calculation of due date is not available.	a .	BST shall provide a full due date calculation capability in the pre-ordering mode of LENS.	A .	April 30, 1998
P'	Dates given are not firm, also the date is assigned by Bell South after it is entered into Bell South's system.	b.	This issue is addressed in 2i of Ordering.	ъ.	January 30, 1998
C.	If technicism is needed, it would not be known to the CLEC. Technicism time could be wasted.	C.	Not an issue (Connect-Through and Quick Serve will solve the problem).	C.	N/A
d	Limited appointment time.	d.	BST is providing this information in a sufficient manner.	d.	N/A
¢.	Access to dedicated facilities info available only after due date is assigned.	€.	This information is presently being provided through Quick Serve, and the proposed API interface will address this issue long-term.	C.	N/A
£.	Changes to due date requires a phone call to LCSC.	£	This issue is addressed in 4a of Ordering.	E.	N/A
g.	Firm Order Confirmation delays.	g.	This issue is addressed in 2i of Ordering.	g.	January 30, 1998
4.	Editing Capabilities				
a.	BellSouth relies upon machine to human interactions.	4 .	This issue is addressed in 4s of Ordering.	•	March 16, 1998 for Version 7.0 January 30, 1998 for LEO, LESOG and SOER
b.	Prevent on-line edit checks, order rejects and must be resubmitted.	b.	This issue is addressed in 4a of Ordering.	b.	March 16, 1998 for Version 7.0 January 30, 1998 for LEO, LESOG and SOER

	POTENTIAL ISSUE		PROPOSED SOLUTION		IMPLEMENTATION TIME FRAME
7.	System Capacity				· · · · · · · · · · · · · · · · · · ·
a. b.	RSAG and LENS lack sufficient capacity to meet reasonable demand. System Lock-Out or Time-Out.	a .	BST is installing new software to resolve this problem. BST is installing new software to resolve this	a .	December 12, 1997 December 12, 1997
			problem.		enternante de la companya de la comp
3.	Systems Integration				
a .	LENS is an interim system that does not provide machine to machine access to BST's legacy systems.	# .	Closed issue (BST will provide system specifications so that CLECs can build their own interfaces to integrate).	•	LENS specifications provided December 12, 1997
b .	LENS pre-ordering interface is not integrated with its EDI ordering interface.	b.	Closed issue (BST will provide system specifications so that CLECs can build their own interfaces to integrate).	b.	CGI specifications available Documber 15, 1997
C.	BST has failed to provide real-time machine to machine access to Direct Order Entry Support Applications Program ("DSAP").	C.	Closed issue (BST will provide system specifications so that CLECs can build their own interfaces to integrate).	C.	December 31, 1997
4	Technical specifications have not been provided to CLECs so they can transfer information into their systems without manual intervention.	d.	Closed issue (BST wil) provide system specifications so that CLECs can build their own interfaces to integrate).	d	December 31, 1997

MAINTENANCE AND REPAIR

	POTENTIAL ISSUE		PROPOSED SOLUTION		IMPLEMENTATION TIME FRAME
1.	Limited Application				
A .	Electronic Bonding Interface (EBI) only provides full service for	a .	BST is implementing EBI with AT&T.	•.	February 2, 1998
b,	access special circuits. TAFI only supports basic local exchange services. All others require manual intervention by BST personnel.	Ь.	EBI will accommodate all services.	þ.	February 2, 1998
2.	Electronic Capabilities				
a. b. c.	BST has not provided EBI for telephone number-based service. No electronic capability to send/receive status on any local telephone service. Electronically issued orders are manually entered into BST system.	B. D.	BST shall provide TAFI specifications to CLECs. Implementation of EBI will address this issue. Implementation of EBI will address this issue.	e. b. c.	January 30, 1998 February 2, 1998 February 2, 1998
3.	System Capacity				
	TAFI lacks sufficient capacity to meet demand (i.e. simultaneous users).		BST will add capacity to accommodate more users as needed.	_	As needed
4.	Long Term Solution				
	EBI-long term is not in place.		BST shall implement EBI. BST is not required to make enhancements to TAFI.		February 2, 1998

MAINTENANCE AND REPAIR

	POTENTIAL ISSUE		PROPOSED SOLUTION		IMPLEMENTATION TIME FRAME
5.	Integration				
	BST failed to provide technical specifications for CLECs' TAFI integration.	•	BST will provide specifications for TAFI to CLECs.	a .	January 30, 1998
b .	TAFI and LENS are not integrated.	b.	BST does not integrate TAFI with its retail pre- ordering and ordering systems. BST will provide specifications for TAFI and LENS to CLECs so that they may perform their own system integration.	b.	January 30, 1998

ORDERING

	POTENTIAL ISSUE		POTENTIAL ISSUE PROPOSED SOLUTION		IMPLEMENTATION TIME FRAME	
1.	Limited Product and Services					
Ł	LENS is not designed to accommodate unbundled loop and certain complex resale orders.	•	BST shall provide business rules to CLECs for Version 7.0 of EDI, LEO, LESOG and SOER.		March 16, 1998 for Version 7.0 January 30, 1998 for LEO, LESOO and SOER	
b.	Limited pre-ordering and ordering gateway interface (provided by LENS and EDI) to the BellSouth resources that link to its legacy systems.	b.	BST shall provide e-mail capabilities for pre- ordering and ordering complex services initially. This is in addition to the current fax capability.	Ъ.	January 30, 1998	
C.	LENS and EDI support only some resale services.	C.	BST in conjunction with carriers will present this issue of mechanized complex orders to OBF.	C	March 30, 1998	
d.	Failure to use industry standard feature identification codes.	4.	Not an issue.	d.	N/A	
Ġ.	Failure to provide a fully automated system for placing complex orders.	C.	BST in conjunction with carriers will present this issue of mechanized complex orders to OBF.	c.	March 30, 1998	
f.	Inability of new entrants using Phase I EDI to order all services that BST now orders electronically to support its retail operations, i.e., cannot be used to order private line, Centrex, ISDN, or complex business services or unbundled network elements.	ſ.	Issue addressed in In, Ib, and Ic.	C.	March 16, 1998 for Version 7.0 January 30, 1998 for LEO, LESOG and SOER	
8	No provision for ordering capabilities for Centrest, some ISDN, MultiServ, complex services, private line services other than Synchronet, or all unbundled network elements when Phase II EDI interface is implemented.	g.	BST in conjunction with carriers will present this issue of mechanized complex orders to OBF.	8	March 30, 1998	
h.	EXACT designed for access, not local service, thus only part of the customers service, such as the loop, can be ordered electronically; the remainder of the customers order, for items such as E911, directory listings, interim number portability, etc. must be ordered through another interface such as EDI or via fax.	h.	Not an issue.	h.	N/A	

ORDERING

POTENTIAL ISSUE		PROPOSED SOLUTION			IMPLEMENTATION TIME FRAME
1.	Ordering (Continued)				
i.	CLEC orders piaced through LENS are currently limited to a maximum of six lines per residence or business request, and a maximum of twenty features per line.	1.	Issue addressed in 3h of Pre-Ordering	i.	End of 1998
2.	Order Status				
6.	LENS and EDI have not led to faster provisioning of simple LSRs.	a .	Not an issue at this type.	•	N/A
b.	Communication processes fail to adequately advise CLECs of the status of the orders placed via the electronic gateways.	b.	Not an issue at this time.	b.	N/A
C.	Sufficient notices not provided to CLEC e.g. service jeopardies, rejects, competitive disconnects, circuit based services.	C.	In the interim, BST will work with carriers on the provision of timely notices.	C.	January 30, 1998
đ	Treatment of CLEC orders as two orders - one to disconnect and	d.	BST is installing software to resolve this issue. BST will verify memory call item is resolved also.	d.	January 5, 1998
C.	Failure to provide adequate flow-through for POTs resale and UNE orders.	€.	BST will share edits and all scenarios which produce order fall out for manual processing.	e.	December 19, 1997
f.	Failure to disclose internal editing and data formatting requirements.	£	BST shall provide business rules to CLECs for Version 7.0 of EDI, LEO, LESOG and SOER.	f.	March 16, 1998 for Version 7.0 January 30,1998 for LEO, LESOG and SOER
g.	Failure to provide sufficient order summaries and/or an order summary screen.	8.	BST and the CLECs have committed to resolve this issue.	g.	First Quarter 1998
b .	No means for CLECs to access and view pending orders.	h.	BST and the CLECs have committed to resolve this issue.	h.	First Quarter 1998
i.	Lack of a system that provides adequate FOC information - the 'soft' FOC before facility availability is determined is inadequate.	i.	BST shall provide the same guarantee of FOC information to CLEC that it provides to its retail operations.	i.	January 30, 1998

ORDERING

POTENTIAL ISSUE		POTENTIAL ISSUE PROPOSED SOLUTION		IMPLEMENTATION TIME FRAME		
2	Order Status (Continued)					
j.	EDI not fully automated, e.g., more than two-thirds of orders placed through its electronic interfaces fell out for manual processing.	j.	BST will share edits and all acenarios which produce order fall out for manual processing.	j.	December 19, 1997	
k	EDI not capable of electronically transmitting necessary provisioning notices, i.e., error notices, reject notices jeopardy notices, status reports.	k .	In the interim, BST will work with carriers on the provision of timely notices.	k.	January 30, 1998	
1	All necessary business rules not provided to CLECs; rules in LEO Guide in error or internally inconsistent.	l.	BST shall provide business rules for CLECs for Version 7.0 of EDI, LEO, LESOG and SOER.	ł.	March 16, 1998 for Version 7.0 January 30, 1998 for LEO, LESOG and SOER	
m.	Batch processing is not real-time or near real-time for ordering.	m.	BST will explore event-driven EDI with AT&T and MCI.	m.	First Quarter 1998	
n.	Access to dedicated facility information is available only after the due date is assigned and not before which would enable a representative to immediately offer the same-day service on a new install that does not require an additional line.	n.	BST shall provide a full due date calculation capability in the pre-ordering mode of LENS.	ŋ.	April 30, 1998	